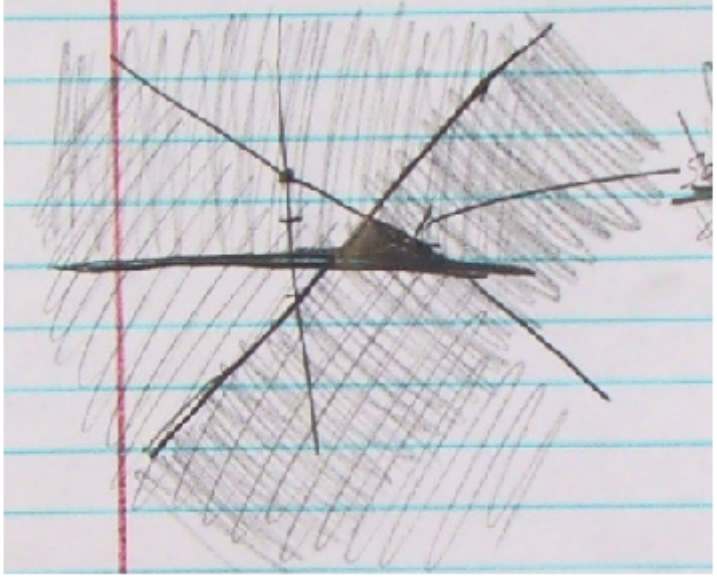
graph: Oct

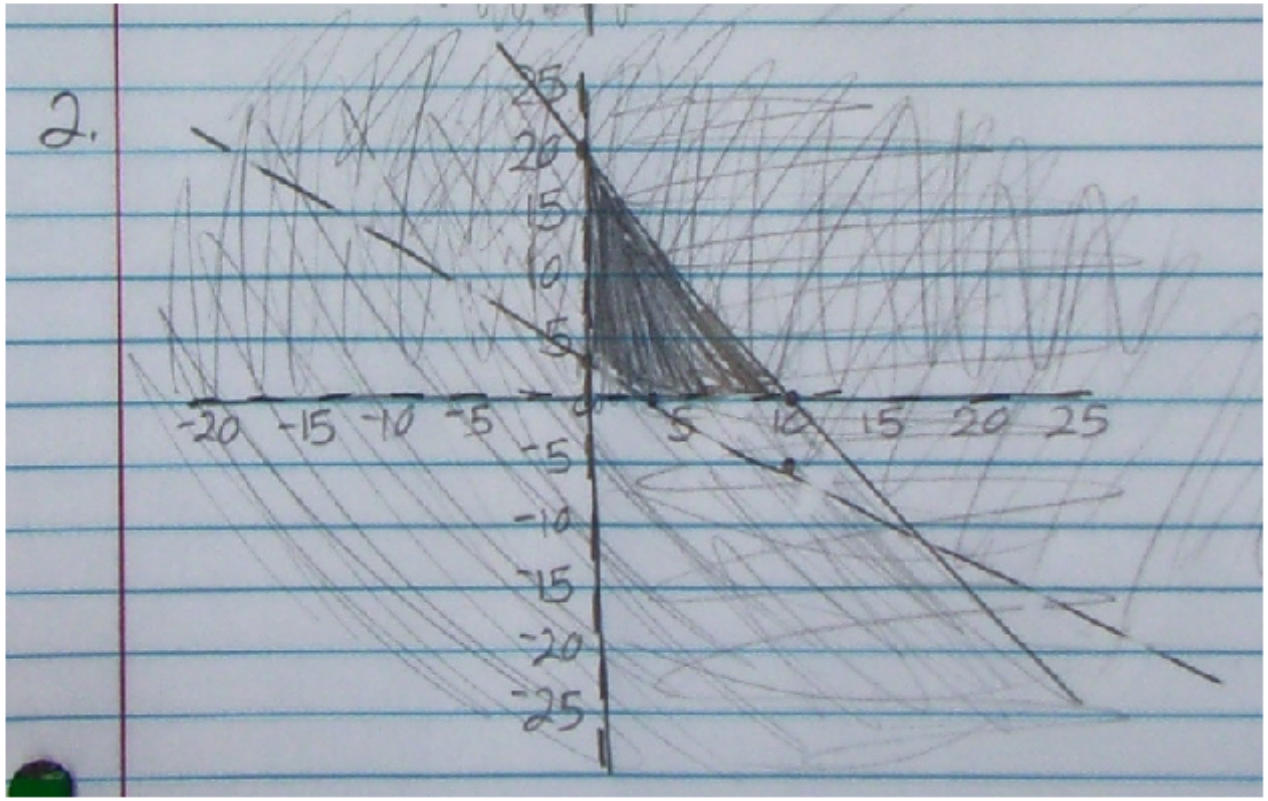
#1) $2x+3y \leq 6$

$x-y \geq 1$

$y \geq 0$



2.



2. $4x+5y \geq 15$

$\frac{3}{2}x + \frac{3}{4}y \leq 15$

$y \geq 0$

$x \geq 0$

Variables:

C - crackers

x

I

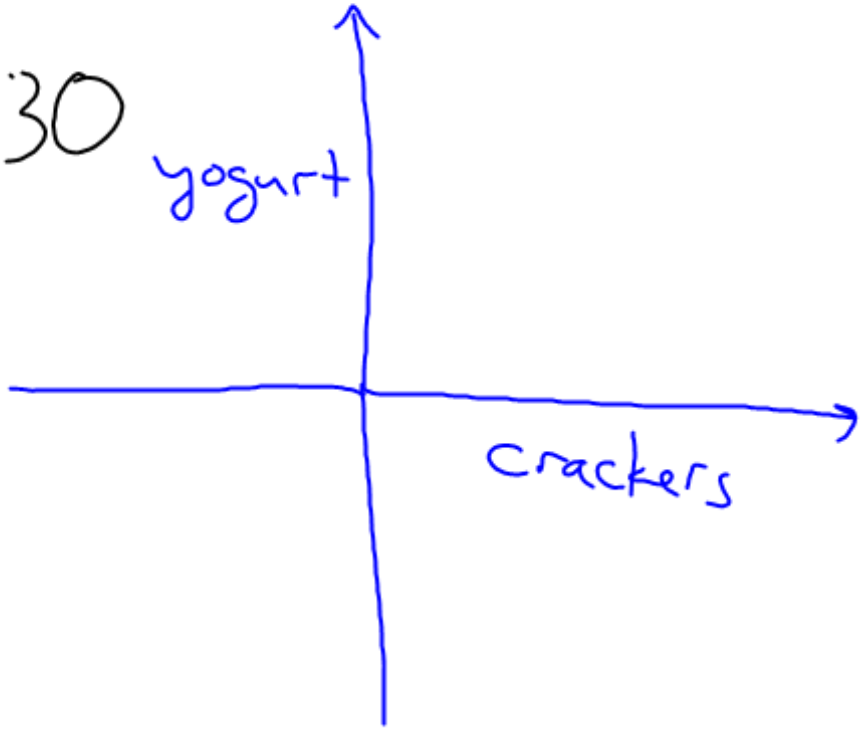
y - yogurt

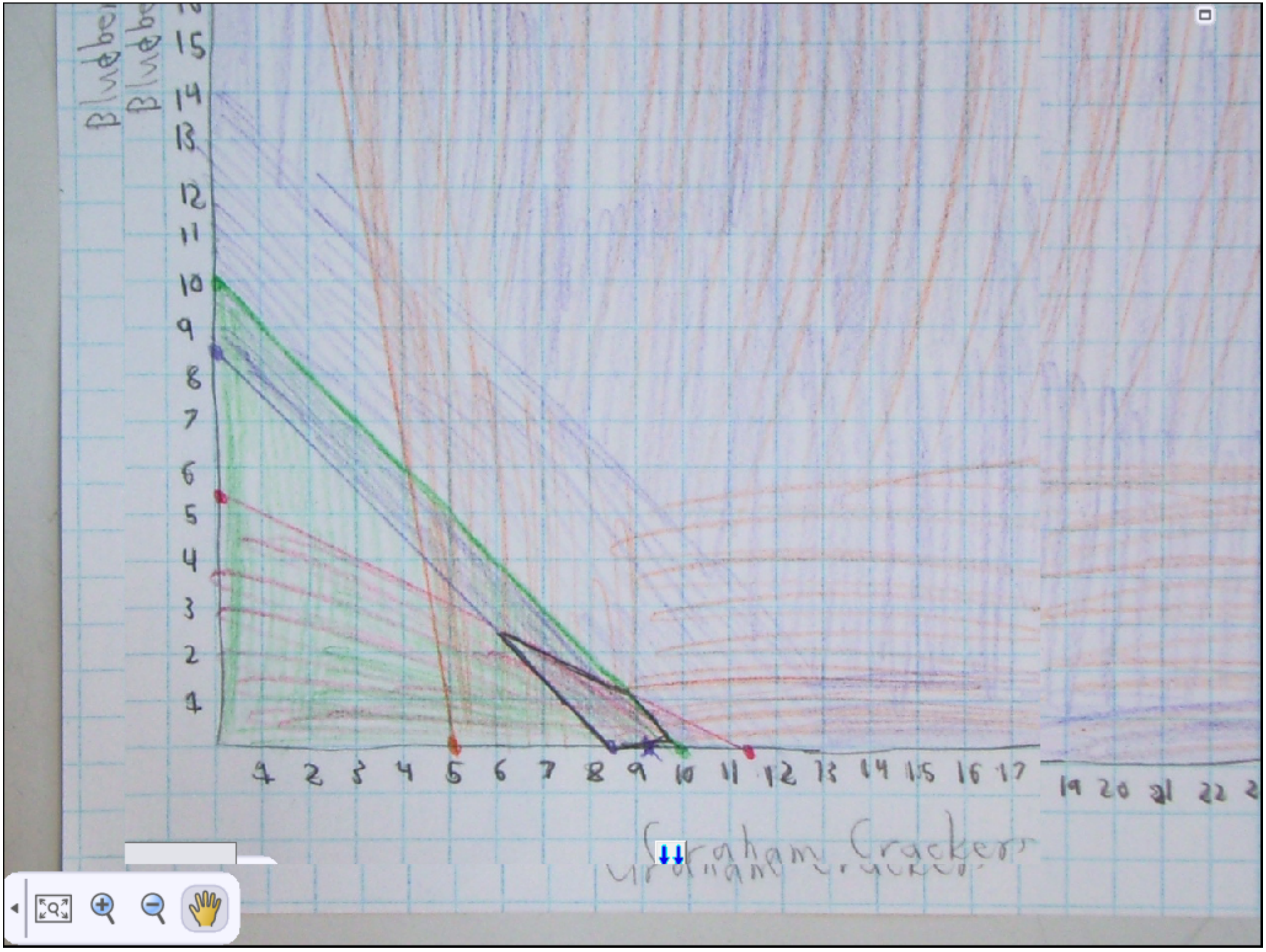
✓ Calories : $60C + 130I \leq 700$

✓ Fat : $2x + 2y \leq 20$

✓ Protein : $2c + 2y \geq 17$

✓ Iron : $6I + y \geq 30$




Blueberry
Blueberry
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
19 20 21 22
Graham Cracker
Graham Cracker

Substitution

$4x + 3y = 4$

$2x - y = 7$

$-2x \qquad -2x$

$-y = 7 - 2x$

$\frac{-y}{-1} = \frac{7-2x}{-1}$

$y = 2x - 7$

$4x + 3(2x - 7) = 4$

$4x + 6x - 21 = 4$

$+21 \qquad +21$

$10x = 25$

$\boxed{x = 2.5}$

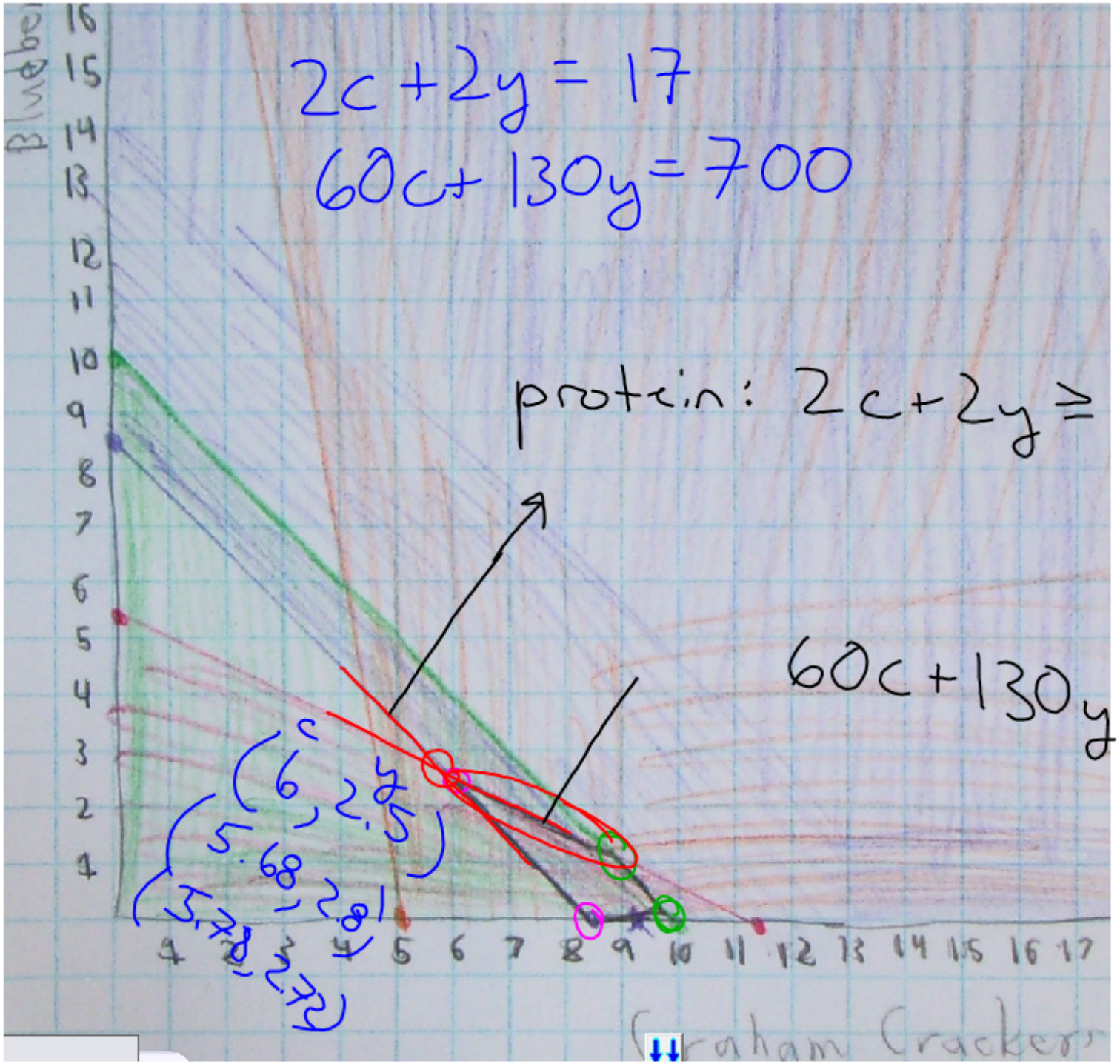
$2(2.5) - y = 7$

$5 - y = 7$

$-5 \qquad -5$

$-y = 2$

$\boxed{y = -2}$


2c + 2y = 17
60c + 130y = 700
protein: 2c + 2y ≥ 17
60c + 130y < 700
Graham Crackers

HW: Section 3.4

p. 142: #1, 2, 4

Algebra2—Extended Problem #1

The contents of a purse are not revealed to us, but we are told that there are exactly 6 pennies and at least one nickel and one dime. We are further told that if the number of dimes was changed to the number of nickels, the number of nickels was changed to the number of pennies, and the number of pennies was changed to the number of dimes, the sum would remain unchanged. Find the *least* possible and the *largest* possible number of coins the purse contains.

Extended Problem Write-Up

1. **State the problem** in your own words. Your problem statement should be clear enough so that someone not familiar with the problem will understand what you are trying to do.
2. **Describe the process** you took in attempting to solve the problem. Use any notes you may have or your memory. Include the steps that did not work as well. Complete this part of the write-up even if you did not come up with a solution. If you received help, describe what kind of help you received and how it helped you.
3. **State your solution.** Be as clear as possible. Include any generalizations you came up with.
4. **Evaluate yourself.** Some questions you may want to ask yourself: Was this problem meaningful? Was it too hard or too easy? Did you enjoy working on it?
5. **Assign yourself a grade**. Give a grade letter for your work and explain why you think you deserve this grade.